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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,530	09/05/2003	John Stevens	VAI.PO26	5572
53556	7590	08/09/2005	EXAMINER	
OPPEDAHL & LARSON LLP- VAI			BROWN, VERNAL U	
P.O. BOX 5068			ART UNIT	
DILLON, CO 80435-5068			PAPER NUMBER	
			2635	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/655,530

Applicant(s)

STEVENS ET AL.

Examiner

Vernal U. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/5/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/5/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The application of John Stevens for Locking Device And Electric Lock Assembly, Drop-Box And Delivery System and Method including the same, filed September 5, 2003 has been examined. Claims 1-20 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1-7, claim 1-7 include the limitation "at least one of said number of windings and said thread pitch are selected to optimize a power consumption" without including any specifics as to how the windings and the thread pitch was selected.

Regarding claim 7, the limitation of twice the winding of a conventional motor does not distinctly point out the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-2, 6-9, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kueng US Patent 6363762 in view of Miller et al. US Patent 6546769 and further in view of Ruchat et al. US Patent 5557888.

Regarding claims 1-2 and 6-7, Kueng teaches a locking device comprising: a drive motor 9 connected to (battery) finite power supply (col. 5 lines 54-55), said drive motor comprising a shaft (col. 6 lines 18-21); and a threaded rod axially connected to said shaft (col. 6 lines 40-45) and thread inherently include a predetermined thread pitch. Kueng is however not explicit in teaching the motor comprising a predetermined number of windings. Miller et al. in an art related lock mechanism teaches a motor comprising a predetermined number of windings (col. 15 lines 32-35) and further teaches conserving the battery power (col. 1 lines 46-47). Kueng in view of Miller et al. is however not explicit in teaching the number of windings is selected to optimize a power consumption of said locking device. Kueng in view of Miller et al. is not explicit in teaching the thread pitch is selected to optimize the power consumption of the lock. Ruchat et al. in an art related door lock device teaches selecting the thread pitch of a door opening and closing mechanism to optimize power consumption (col. 2 lines 44-49).

It would have been obvious to one of ordinary skill in the art to select the number of windings to optimize a power consumption of said locking device in Kueng as evidenced by Miller et al. because Kueng suggests a drive motor connected to a finite power supply for driving a locking device and Miller et al. teaches a motor comprising a predetermined number of windings and Ruchat et al. teaches selecting the thread pitch of a door opening and closing mechanism to optimize power consumption.

Regarding claims 8-9, Kueng teaches a locking device comprising: a drive motor 9 connected to (battery) finite power supply (col. 5 lines 54-55), said drive motor comprising a shaft (col. 6 lines 18-21); and a threaded rod axially connected to said shaft (col. 6 lines 40-45) and thread inherently include a predetermined thread pitch. Kueng further teaches a traveler 54 (figure 9) for mating with the threaded rod and a lock member 2 contacting the traveler and a strike 11.1 for receiving the lock member (figure 12). Kueng is however not explicit in teaching the motor comprising a predetermined number of windings. Miller et al. in an art related lock mechanism teaches a motor comprising a predetermined number of windings (col. 15 lines 32-35) and further teaches conserving the battery power (col. 1 lines 46-47). Kueng in view of Miller et al. is however not explicit in teaching the number of windings is selected to optimize a power consumption of said locking device. Ruchat et al. in an art related door lock device teaches selecting the thread pitch of a door opening and closing mechanism to optimize power consumption (col. 2 lines 44-49).

It would have been obvious to one of ordinary skill in the art to select the number of windings to optimize a power consumption of said locking device in Kueng as evidenced by Miller et al. because Kueng suggests a drive motor connected to a finite power supply for driving a locking device and Miller et al. teaches a motor comprising a predetermined number of windings and Ruchat et al. teaches selecting the thread pitch of a door opening and closing mechanism to optimize power consumption.

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Regarding claim 17-19, Kueng in view of Miller et al. teaches a locking device comprising: a drive motor 9 connected to (battery) finite power supply (col. 5 lines 54-55) but is not explicit in teaching the type of battery used. One skilled in the art recognizes that batteries are available of various sizes and capacity and a battery is chosen according to design requirements.

It would have been obvious to one of ordinary skill in the art for the locking device to include a finite power supply of 200mAH, D battery and 30,000 cycles, AA of 40,000 cycles in Kueng in view of Miller et al. because Kueng in view of Miller et al. teaches a locking device comprising a drive motor connected to (battery) finite power supply and one skilled in the art that batteries are available of various size and capacity and a battery is chosen according to design requirements.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kueng US Patent 6363762 in view of Miller et al. US Patent 6546769 in view of Ruchat et al. US Patent 5557888 and further in view of Sanderford, Jr. US Patent 4684945.

Regarding claim 3, Kueng in view of Miller et al. teaches a locking device having a drive motor 9 connected to a finite power supply (col. 5 lines 54-55) but is silent on teaching finite power supply supplies pulses of electricity to the drive motor. Sanderford, Jr. in an art related electronic Lock teaches a supplying power pulses to the driving motor of the locking device (col. 6 lines 17-32).

It would have been obvious to one of ordinary skill in the art to for the finite power supply to provide pulses of electricity to drive the motor in Kueng in view of Miller et al. in view of Ruchat et al. as evidenced by Sanderford, Jr. because Kueng in view of Miller et al. suggests a

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locking device having a drive motor connected to a finite power supply and Sanderford, Jr. teaches supplying power pulses to the driving motor of the locking device and Filliman also teaches .

Claim 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kueng US Patent 6363762 in view of Miller et al. US Patent 6546769 in view of Ruchat et al. US Patent 5557888 and further in view of Sanderford, Jr. US Patent 4684945 in view of Franz, Jr. et al. US Patent 4355267.

Regarding claims 4-5, Kueng in view of Miller et al. in view of Sanderford, Jr. teaches supplying pulses of electricity to the motor (see response to claim 3) but is silent on teaching the pulses are no greater than 100 milliamps. Franz, Jr. et al. in an art related motor control invention teaches a motor having an operating power mode of 60 milliamps.

It would have been obvious to one of ordinary skill in the art to supply electricity pulses or no more than 50 or 100 milliamps in Kueng in view of Miller et al. in view of Sanderford, Jr. as evidenced by Franz, Jr. et al. because Kueng in view of Miller et al. suggests supplying pulses of electricity to the motor and Franz, Jr. teaches a motor with an operating current of not more than 100 milliamps and one skilled in the art recognizes that the current supply by the voltage source varies based on the load been driven.

Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kueng US Patent 6363762 in view of Miller et al. US Patent 6546769 in view of Ruchat et al. US Patent 5557888 in view of Ho US Patent 5957286 and further in view of Kucharczyk et al. US Patent 6300873.

Regarding claims 10-11, Kueng in view of Miller et al. teaches a lock assembly (figure 1) but is silent on teaching the walls a drop box forming a first and second member for of the lock assembly. Ho in an art related lock system teaches a box with a locking mechanism 40 and the door and the wall of the box provides the attachment for the locking device. The reference of Kucharczyk et al. further teaches a lock integrated in a drop box (col. 10 lines 52-55) in order to secure access to the drop box.

It would have been obvious to one of ordinary skill in the art to have a drop box forming a first and second member for of the lock assembly in Kueng in view of Miller et al. as evidenced by Ho in view of Kucharczyk et al. because Kueng in view of Miller et al. suggests a lock assembly and Ho in view of Kucharczyk et al. teaches a box with a locking mechanism 40 and the door and the wall of the box provides the attachment for the locking device in order to provided locking apparatus integrated in the drop box.

Regarding claims 12-16, Kueng in view of Miller et al. in view of Ho teaches a lock assembly (figure 1) for securing an enclosure but is silent on teaching an electronic tag associated with a transceiver. Kucharczyk et al. in an art related locking mechanism teaches a drop box having a RF transceiver interface 34 and a remote unit 90 is used to communicate with the transceiver to open the lock (col. 12 lines 51-56). Kucharczyk et al. teaches the drop box comprises a memory device 56 for storing identification number and a processor for comparing the identification number for granting access (col. 10 lines 52-55). Kucharczyk et al. is however silent on teaching an electronic tag associated with the deposited item. Cannon, Jr. et al. teaches an electronic tag associated with an item place in a storage unit and the tag communicate with a

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transceiver 54 (col. 4 lines 56-65) in order to monitor the addition and removal of an item from storage.

It would have been obvious to one of ordinary skill in the art to have an electronic tag associated with a transceiver and a second receiver communicate with the first transceiver for opening the drop box in Kueng in view of Miller et al. in view of Ho as evidenced by Kucharczyk et al. in view of Cannon, Jr. et al. because Kueng in view of Miller et al. in view of Ho suggests a locking device for securing a container and Kucharczyk et al. in view of Cannon, Jr. et al. teaches locking mechanism teaches a drop box having a RF transceiver interface 34 and a remote unit is used to communicate with the transceiver to open the lock. Kucharczyk et al. teaches the drop box comprises a memory device 56 for storing identification number and a processor for comparing the identification number for granting access and Cannon, Jr. et al. teaches an electronic tag associated with an item place in a storage unit and the tag communicate with a transceiver in order to monitor the addition and removal of an item from storage.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kueng US Patent 6363762 in view of Miller et al. US Patent 6546769 in view of Ruchat et al. US Patent 5557888 in view of Ho US Patent 5957286 and further in view of Maloney US Patent 6204764.

Regarding claim 20, Kueng in view of Miller et al. in view of Ruchat et al. in view of Ho teaches the use of a locking device to secure a container (*see response to claim 10*) but is silent on teaching associating items contained in the container with an electronic tag and opening the lock assembly by communicating by means of a second transceiver with the transceiver of the tag. Maloney in an art related object tracking system teaches associating a tag 62 with an item to be placed in a container (col. 8 lines 12-15) and a second transceiver 67 is used to communicate

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with the tag (col. 8 lines 12-20) in order to track the addition and removal of item to and from a storage device.

It would have been obvious to one of ordinary skill in the art to associating items contained in the container with an electronic tag and opening the lock assembly by communicating by means of a second transceiver with the transceiver of the tag in Kueng in view of Miller et al. in view of Ruchat et al. in view of Ho as evidenced by Maloney because Kueng in view of Miller et al. in view of Ho suggests the use of a locking device to secure a container and Maloney teaches associating a tag 62 with an item to be placed in a container and a second transceiver 67 is used to communicate with the tag in order to track the addition and removal of item to and from a storage device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vernal U. Brown whose telephone number is 571-272-3060. The examiner can normally be reached on 8:30-7:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Vernal Brown
August 4, 2005



BRIAN ZIMMERMAN
PRIMARY EXAMINER